

*In the claims:*

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 1. (Currently Amended) A blade support sub-assembly adapted to be used with a scraper  
2 blade for scraping and cleaning a conveyor belt and with a mounting sub-assembly,  
3 comprising:  
4 a pair of notched receiving members, each notched receiving member having a  
5 notch formed from a front vertical stabilizer and a rear vertical stabilizer, said notch for  
6 receiving a scraper blade, and said pair of notched receiving members adapted for use  
7 with a mounting sub-assembly;  
8 a face plate extending between said pair of notched receiving members and about  
9 parallel to the scraper blade such that at least a portion of the scraper blade rests flush  
10 against said face plate when the scraper blade is situated in said pair of notched receiving  
11 members; and  
12 a means for vertically adjusting ~~and rigidly fixing~~ a height of the scraper blade in  
13 relation to a fixed position of said pair of notched receiving members and said face plate  
14 such that the scraper blade is rigidly fixed at a selected height and is in contact with a  
15 surface of the conveyor belt to be scraped.
- 1 2. (Currently Amended) The blade support sub-assembly according to claim 1, wherein said  
2 means for vertically adjusting ~~and rigidly fixing~~ a height of the scraper blade in relation to  
3 a fixed position of said pair of notched receiving members comprises a horizontal blade  
4 stabilizer approximately perpendicular to and extending beneath said face plate, and one  
5 or more adjustable lock bolts extending upward through said horizontal blade stabilizer  
6 and in communication with a bottom surface of the scraper blade, wherein rotating one  
7 said adjustable lock bolt in a first direction raises said adjustable lock bolt and the scraper

1 blade, and rotating one said adjustable lock bolt in a second direction lowers said  
2 adjustable lock bolt and the scraper blade.

1 3. (Original) The blade support sub-assembly according to claim 1, further comprising a  
2 means for removably securing the scraper blade within said notches of said pair of  
3 notched receiving members.

1 4. (Previously Presented) The blade support sub-assembly according to claim 3, wherein  
2 said means for removably securing the scraper blade comprises one or more adjustable  
3 screws and said face plate having one or more holes that align with one or more holes in a  
4 scraper blade, wherein each of said adjustable screws is adapted to pass through one of  
5 the holes in the scraper blade and through one of said holes in said face plate, thereby  
6 securing the scraper blade to said face plate at a fixed position.

1 5. (Original) The blade support sub-assembly according to claim 1, further comprising a  
2 shield attached to the scraper blade, wherein said shield extends from the scraper blade  
3 and over the blade support sub-assembly.

1 6. (Original) The blade support sub-assembly according to claim 1, wherein said rear  
2 vertical stabilizer is taller in height than said front vertical stabilizer.

1 7. (Original) The blade support sub-assembly according to claim 1, further comprising a  
2 scraper blade having a blade insert fixed within a blade housing.

1 8. (Original) The blade support sub-assembly according to claim 1, further comprising a  
2 means for spraying a liquid on the conveyor belt.

1 9. (Original) The blade support sub-assembly according to claim 8, wherein said means for  
2 spraying a liquid comprises a pipeline, for transporting a liquid, having one or more  
3 nozzles, a means for restricting a flow of the liquid through said pipeline, and a means for  
4 securing said pipeline and said one or more nozzles in proximity to the blade support sub-  
5 assembly.

1 10. (Previously Presented) A blade support sub-assembly adapted to be used with a scraper  
2 blade for scraping and cleaning a conveyor belt and with a mounting sub-assembly,  
3 comprising:

4 a pair of notched receiving members, each notched receiving member having a  
5 notch formed from a front vertical stabilizer and a rear vertical stabilizer, said notch for  
6 receiving a scraper blade, and said pair of notched receiving members adapted for use  
7 with a mounting sub-assembly;

8 a face plate extending between said pair of notched receiving members and about  
9 parallel to the scraper blade such that at least a portion of the scraper blade rests flush  
10 against said face plate when the scraper blade is situated in said pair of notched receiving  
11 members;

12 a means for vertically adjusting a height of the scraper blade in relation to a fixed  
13 position of said pair of notched receiving members such that the scraper blade is in  
14 contact with a surface of the conveyor belt to be scraped;

15 a means for spraying a liquid on the conveyor belt, wherein said means for  
16 spraying a liquid comprises a pipeline, for transporting a liquid, having one or more  
17 nozzles, a means for restricting a flow of the liquid through said pipeline, and a means for  
18 securing said pipeline and said one or more nozzles in proximity to the blade support sub-  
19 assembly; and

20 a shield, having one or more holes, attached to the scraper blade, wherein said  
21 shield extends from the scraper blade and over the blade support sub-assembly, wherein

each of said one or more nozzles of said pipeline aligns with and extends through one of said one or more holes in said shield.

11. (Previously Presented) The blade support sub-assembly according to claim 10, wherein said shield is attached to a front of the scraper blade such that the liquid is sprayed toward the conveyor belt.

12. (Previously Presented) The blade support sub-assembly according to claim 10, wherein said shield is attached to a rear of the scraper blade such that the liquid is sprayed toward the conveyor belt.

13. (Previously Presented) A blade support sub-assembly adapted to be used with a scraper blade for scraping and cleaning a conveyor belt and with a mounting sub-assembly, comprising:

a pair of notched receiving members, each notched receiving member having a notch formed from a front vertical stabilizer and a rear vertical stabilizer, said notch for receiving a scraper blade, and said pair of notched receiving members adapted for use with a mounting sub-assembly;

a face plate extending between said pair of notched receiving members and about parallel to the scraper blade such that at least a portion of the scraper blade rests flush against said face plate when the scraper blade is situated in said pair of notched receiving members;

a means for vertically adjusting a height of the scraper blade in relation to a fixed position of said pair of notched receiving members such that the scraper blade is in contact with a surface of the conveyor belt to be scraped; and

a means for spraying a liquid on the conveyor belt, wherein the liquid is selected from the group consisting of water, a cleaning agent, a solvent, anti-freeze, and a dust

17 inhibitor.

Claims 14-21 (Cancelled)

1 22. (Previously Presented) The blade support sub-assembly according to claim 26, wherein  
2 said means for spraying a liquid comprises a pipeline, for transporting a liquid, having  
3 one or more nozzles, a means for restricting a flow of the liquid through said pipeline,  
4 and a means for securing said pipeline and said one or more nozzles in proximity to the  
5 blade support sub-assembly.

1 23. (Previously Presented) A blade support sub-assembly adapted to be used with a scraper  
2 blade for scraping and cleaning a conveyor belt and with a mounting sub-assembly,  
3 comprising:

4 a pair of notched receiving members, each notched receiving member having a  
5 notch formed from a front vertical stabilizer and a rear vertical stabilizer, said notch for  
6 receiving a scraper blade, and said pair of notched receiving members adapted for use  
7 with a mounting sub-assembly;

8 a face plate extending between said pair of notched receiving members and about  
9 parallel to the scraper blade such that at least a portion of the scraper blade rests flush  
10 against said face plate when the scraper blade is situated in said pair of notched receiving  
11 members;

12 a means for spraying a liquid on the conveyor belt, wherein said means for  
13 spraying a liquid comprises a pipeline, for transporting a liquid, having one or more  
14 nozzles, a means for restricting a flow of the liquid through said pipeline, and a means for  
15 securing said pipeline and said one or more nozzles in proximity to the blade support sub-  
16 assembly; and

17 a shield, having one or more holes, attached to the scraper blade, wherein said

18 shield extends from the scraper blade and over the blade support sub-assembly, wherein  
19 each of said one or more nozzles of said pipeline aligns with and extends through one of  
20 said one or more holes in said shield.

1 24. (Previously Presented) The blade support sub-assembly according to claim 23, wherein  
2 said shield is attached to a front of the scraper blade such that the liquid is sprayed toward  
3 the conveyor belt.

1 25. (Previously Presented) The blade support sub-assembly according to claim 23, wherein  
2 said shield is attached to a rear of the scraper blade such that the liquid is sprayed toward  
3 the conveyor belt.

1 26. (Previously Presented) A blade support sub-assembly adapted to be used with a scraper  
2 blade for scraping and cleaning a conveyor belt and with a mounting sub-assembly,  
3 comprising:

4 a pair of notched receiving members, each notched receiving member having a  
5 notch formed from a front vertical stabilizer and a rear vertical stabilizer, said notch for  
6 receiving a scraper blade, and said pair of notched receiving members adapted for use  
7 with a mounting sub-assembly;

8 a face plate extending between said pair of notched receiving members and about  
9 parallel to the scraper blade such that at least a portion of the scraper blade rests flush  
10 against said face plate when the scraper blade is situated in said pair of notched receiving  
11 members; and

12 a means for spraying a liquid on the conveyor belt, wherein the liquid is selected  
13 from the group consisting of water, a cleaning agent, a solvent, anti-freeze, and a dust  
14 inhibitor.

## Claims 27-30 (Cancelled)

1 31. (Previously Presented) The blade support sub-assembly according to claim 26, wherein  
2 said mounting sub-assembly comprises a first hollow member being an elongated tube  
3 having an internal diameter, a second member being an elongated component having an  
4 external diameter less than said internal diameter of said first hollow member wherein  
5 said second member is inserted within said first hollow member thereby creating a space  
6 between said first hollow member and said second member, a means for restricting  
7 rotation of said second member within said first hollow member contained within said  
8 space, a means for securing said second member to said pair of notched receiving  
9 members such that as said second member rotates within said first hollow member said  
10 notched receiving members rotate, and a means for securing said first hollow member at a  
11 position below the conveyor belt such that the scraper blade is in contact with the  
12 conveyor belt.

1 32. (Previously Presented) The blade support sub-assembly according to claim 31, wherein  
2 said second member has a length longer than said first hollow member.

1 33. (Previously Presented) The blade support sub-assembly according to claim 31, wherein  
2 said first hollow member and said second member have a generally square cross-sectional  
3 shape.

1 34. (Previously Presented) The blade support sub-assembly according to claim 33, wherein  
2 said second member is offset approximately 45 degrees from said first hollow member  
3 when said second member is inserted within said first hollow member.

1 35. (Previously Presented) The blade support sub-assembly according to claim 34, wherein

1           said second member has rounded corners.

1       36.   (Previously Presented) The blade support sub-assembly according to claim 31, wherein  
2           said means for restricting rotation of said second member within said first hollow  
3           member contained within said space is one or more torsion elements in said space.

1       37.   (Previously Presented) The blade support sub-assembly according to claim 36, wherein  
2           said one or more torsion elements are elongated bars of rubber having a length generally  
3           equal to a length of said first hollow member.

1       38.   (Previously Presented) The blade support sub-assembly according to claim 37, wherein  
2           said torsion elements have a generally circular cross-sectional shape.

1       39.   (Previously Presented) The blade support sub-assembly according to claim 32, wherein  
2           said means for securing said second member to said pair of notched receiving members  
3           comprises a first end of said second member protruding through a hole in one of said pair  
4           of notched receiving members and a second end of said second member protruding  
5           through a hole in a second of said pair of notched receiving members.

1       40.   (Previously Presented) The blade support sub-assembly according to claim 1, wherein  
2           said face plate is positioned between said notched receiving members such that said face  
3           plate is at a height aligned with a height of said rear vertical stabilizer of each said  
4           notched receiving member.

1       41.   (Previously Presented) The blade support sub-assembly according to claim 1, further  
2           comprising:  
3                 a shield attached to the scraper blade, wherein said shield extends from the scraper



1 blade and over the blade support sub-assembly.

1 42. (Previously Presented) The blade support sub-assembly according to claim 1, wherein  
2 said mounting sub-assembly comprises a first hollow member being an elongated tube  
3 having an internal diameter, a second member being an elongated component having an  
4 external diameter less than said internal diameter of said first hollow member wherein  
5 said second member is inserted within said first hollow member thereby creating a space  
6 between said first hollow member and said second member, a means for restricting  
7 rotation of said second member within said first hollow member contained within said  
8 space, a means for securing said second member to said pair of notched receiving  
9 members such that as said second member rotates within said first hollow member said  
10 notched receiving members rotate, and a means for securing said first hollow member at a  
11 position below the conveyor belt such that the scraper blade is in contact with the  
12 conveyor belt.

1 43. (Previously Presented) The blade support sub-assembly according to claim 42, wherein  
2 said second member has a length longer than said first hollow member.

1 44. (Previously Presented) The blade support sub-assembly according to claim 42, wherein  
2 said first hollow member and said second member have a generally square cross-sectional  
3 shape.

1 45. (Previously Presented) The blade support sub-assembly according to claim 44, wherein  
2 said second member is offset approximately 45 degrees from said first hollow member  
3 when said second member is inserted within said first hollow member.

1 46. (Previously Presented) The blade support sub-assembly according to claim 45, wherein

1           said second member has rounded corners.

1       47.   (Previously Presented) The blade support sub-assembly according to claim 42, wherein  
2           said means for restricting rotation of said second member within said first hollow  
3           member contained within said space is one or more torsion elements in said space.

1       48.   (Previously Presented) The blade support sub-assembly according to claim 47, wherein  
2           said one or more torsion elements are elongated bars of rubber having a length generally  
3           equal to a length of said first hollow member.

1       49.   (Previously Presented) The blade support sub-assembly according to claim 48, wherein  
2           said torsion elements have a generally circular cross-sectional shape.

1       50.   (Previously Presented) The blade support sub-assembly according to claim 43, wherein  
2           said means for securing said second member to said pair of notched receiving members  
3           comprises a first end of said second member protruding through a hole in one of said pair  
4           of notched receiving members and a second end of said second member protruding  
5           through a hole in a second of said pair of notched receiving members.